MANUAL MESSAGE ADDRESS SEGREGATOR

INSTALLATION AND CHECKOUT PROCEDURES

CONTENTS PAGE

1. GENERAL

1.01 This section provides installation and checkout procedures for the Manual Message Address Segregator. It also provides illustrations of related adjustments to be checked in case it becomes necessary to reinstall a segregator after disassembly.

1.02 The segregator is shipped from the factory completely assembled and ready to operate, except for unpacking and setting the switching control assembly and the transmitter distributor on top of the table as indicated in Figure 1, and as instructed in Part 2.

1.03 For detailed circuit description and all related wiring diagrams covering the segregator, refer to the Wiring Diagram Package WDP0116 shipped with the equipment.

DIMENSIONS

1.04 Overall dimensions of the segregator are:

Height . . . . . .32-5/8 inches
Width . . . . . .20-1/2 inches
Depth . . . . . .18-5/16 inches

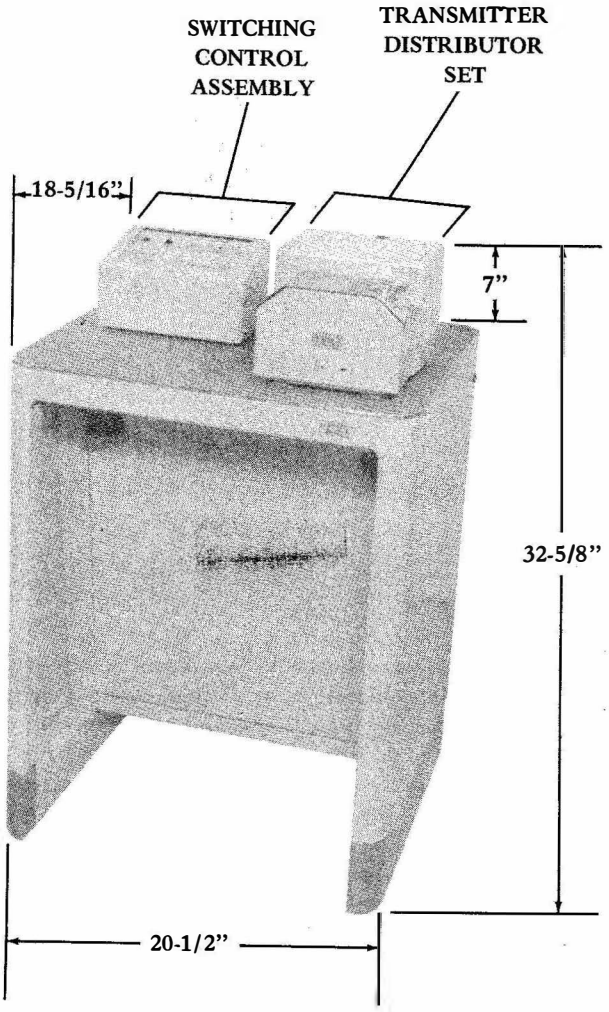


Figure 1 - Manual Message Address Segregator

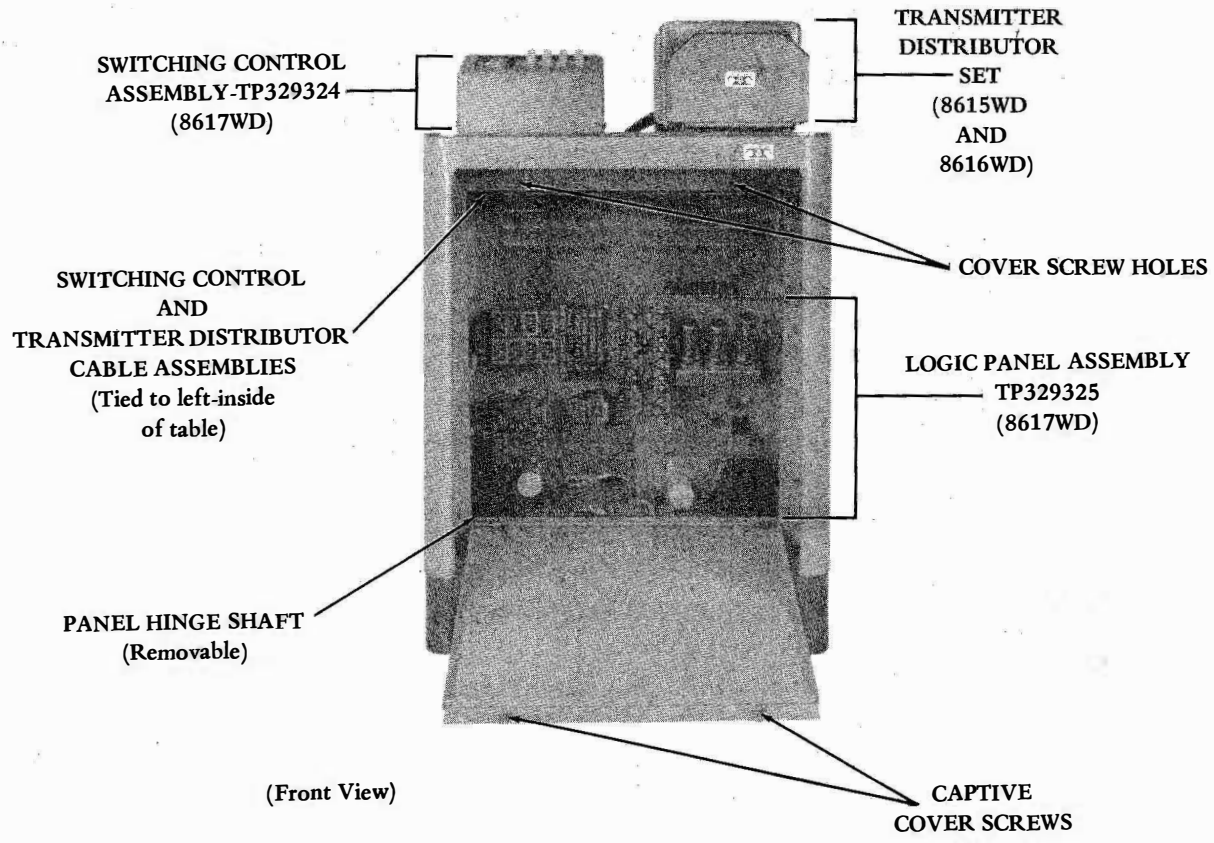


Figure 2 - Manual Message Address Segregator with Cover Panel Open

TECHNICAL DATA

1.05 The Manual Message Address Segregator operates only in conjunction with other, external equipment. It simultaneously supplies the dc loop current for one to nine separate loops. The wiring for one of these loops is arranged for a monitor printer that will print all characters transmitted. Each of the other 8 loops will supply equipment such as a reperforator. The segregator power and external equipment requirements are:

Power input to segregator	115 v, 60 hertz
Loop current & voltage	0.020 ampere, 120 v dc for each loop
Code	7.00 unit, start-stop
Speed	107 wpm (75 baud)

ASSOCIATED LITERATURE

1.06 Refer to Table A for related literature pertaining to the Manual Message Address Segregator and its components.

2. INSTALLATION

CAUTION: CARE SHALL BE EXERCISED IN UNPACKING SO AS NOT TO DROP OR JAR THE EQUIPMENT, AND TO PREVENT DAMAGE OR LOSS OF SMALL PARTS.

2.01 Place the table in the desired location. The space requirements are indicated in Figure 1.

2.02 To place the segregator in service connect the three cables (shown in Figure 3) and the main power cable, located at the lower rear of the table.

2.03 Place the transmitter distributor and the switching control assembly on top of the table. Orientation of these two items, should be that preferred by the operator (Figure 1).

2.04 Feed the "UA" connector end of the TP332540 Cable Assembly thru the hole in the top of the table to the mating "UA" connector on the logic panel (Figure 3).

Note: Main Power Cable at back of Table (not shown)

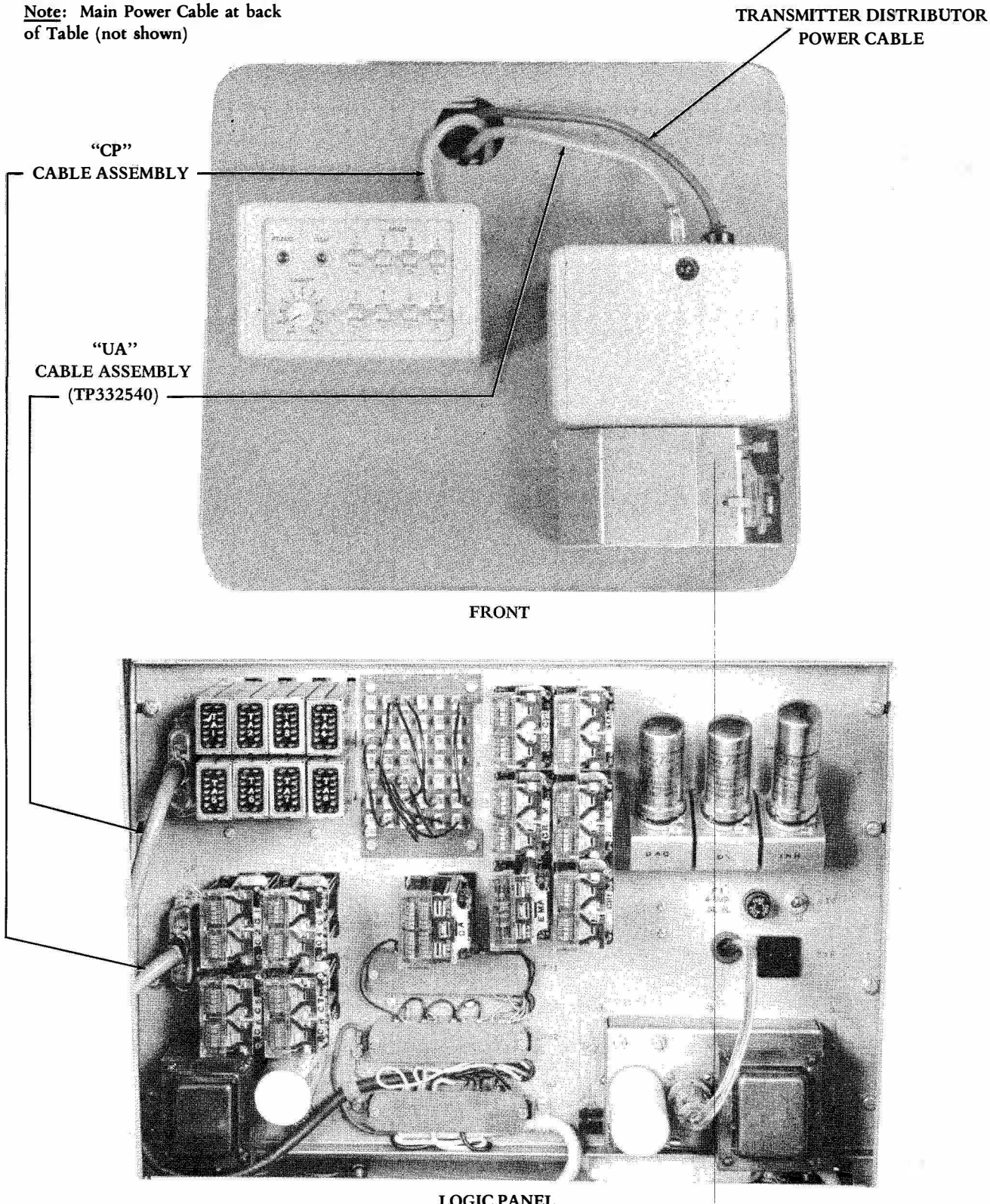


Figure 3 - Top of Segregator and Front View of Logic Panel

TABLE A

ASSOCIATED LITERATURE

EQUIPMENT	CONTENTS	SECTION NUMBER
Segregator	Description and Operation	573-114-100TC
Segregator	Installation and Checkout Procedures	573-114-200TC
Segregator	Circuit Description, Schematic and Actual Wiring Diagrams	573-114-400TC
Segregator	Parts	573-130-803TC
Transmitter Distributor Set	Description	573-105-100TC
Transmitter Distributor	Description and Principles of Operation	573-127-101TC
Transmitter Distributor	Adjustments	573-127-703TC
Transmitter Distributor	Lubrication	573-127-704TC
Transmitter Distributor	Disassembly and Reassembly	573-127-705TC
Transmitter Distributor	Parts	573-127-801TC
Transmitter Distributor Base	Description	573-128-101TC
Transmitter Distributor Base	Adjustments	573-128-700TC
Transmitter Distributor Base	Lubrication	573-128-701TC
Transmitter Distributor Base	Parts	573-130-802TC
Motor Unit	Description and Principles of Operation	570-220-100TC
Motor Unit	Adjustments	570-220-700TC
Motor Unit	Lubrication	570-220-701TC
Motor Unit	Parts	570-220-800TC
Standard Maintenance Tools	Part Numbers	570-005-800TC

2.05 Feed the "CP" cable from the switching control assembly thru the table top hole to the mating connector in the logic panel (Figure 3).

2.06 Feed the transmitter distributor set power cable with the receptacle connector (part of and from the logic panel) up thru the hole in the table top into the mating connector on the transmitter assembly.

2.07 Take up the slack of the three cables inside the table. Dress and tie the cables to the left bracket so that they do not interfere with relays on the logic panel (Figure 2).

2.08 Connect the main power cable assembly to a convenient 115 v, 60 hertz receptacle.

TABLE B

CONNECTIONS FROM SEGREGATOR TO SUPPORTING EQUIPMENT

REPERFORATOR SET	SIGNAL INPUT	LOGIC PANEL TERMINAL
NO. 1	(-)	TB1-1
	(+)	TB1-2
NO. 2	(-)	TB1-3
	(+)	TB1-4
NO. 3	(-)	TB1-5
	(+)	TB1-6
NO. 4	(-)	TB1-7
	(+)	TB1-8
NO. 5	(-)	TB2-1
	(+)	TB2-2
NO. 6	(-)	TB2-3
	(+)	TB2-4
NO. 7	(-)	TB2-5
	(+)	TB2-6
NO. 8	(-)	TB2-7
	(+)	TB2-8
MONITOR SET	(-)	TB2-9
	(+)	TB1-9

CONNECTIONS TO SUPPORTING EQUIPMENT

2.09 The reperforator sets and the monitor set must be able to operate on 0.020 ampere neutral local loops. These sets are not part of the segregator.

2.10 Connect the reperforator sets and the monitor set to the terminal boards on the logic panel as shown in Table B. The loop wire or cable is not furnished as part of the segregator. See sheets B1 and G1 of 8617WD.

OPTION A TO STOP ON START-OF-MESSAGE (CZCZ)

2.11 Option A causes the transmitter to stop on reading the Start-of-Message character sequence.

2.12 The segregator is factory wired to include Option A.

2.13 To disable Option A. remove the strap between terminals 13 and 17 on the "T" terminal strip of the logic panel.

TERMINAL BOARD "A" STRAPPING

2.14 Terminal Board "A" is strapped by the factory as shown in Figure 4 and Table C.

2.15 Should any change in the character sequence be desired. disconnect the lead end in the "TO" colume (Table C) and reconnect it to the desired character in the CHARACTER RECOGNITION field ~~(Figure 5).~~ (FIGURE 4).

3. CHECKOUT PROCEDURES

3.01 Prepare a test tape having the following characters:

CRCR LF TEST MESSAGE CRCR LF
CZCZ THIS IS START OF MESSAGE SEQUENCE CRCR LF
FM THIS IS START OF ADDRESS SEQUENCE CRCR LF
FIRST ADDRESS CRCR LF
SECOND ADDRESS CRCR LF
BT THE QUICK BROWN FOX TEXT

3.02 Connect the line or a SMD associated with a monitor printer to Terminals TB1-9 and TB2-9. (See CAD 2 of 8617WD-G1.) This monitor will copy all transmitted characters.

3.03 Connect the lines of associated reperforator sets or test equipment as shown in Table B.

3.04 With ac power connected. operate the MTC switch to the ON position. Operate the transmitter distributor power switch to ON. The monitor printer and the reperforators should run closed.

3.05 Operate the SELECT keys 1 through 8. The lamps in the key handles should light. Restore the keys to normal.

3.06 Place the test tape in the transmitter gate.

3.07 Set the rotary switch CONNECT to any of the ALL positions.

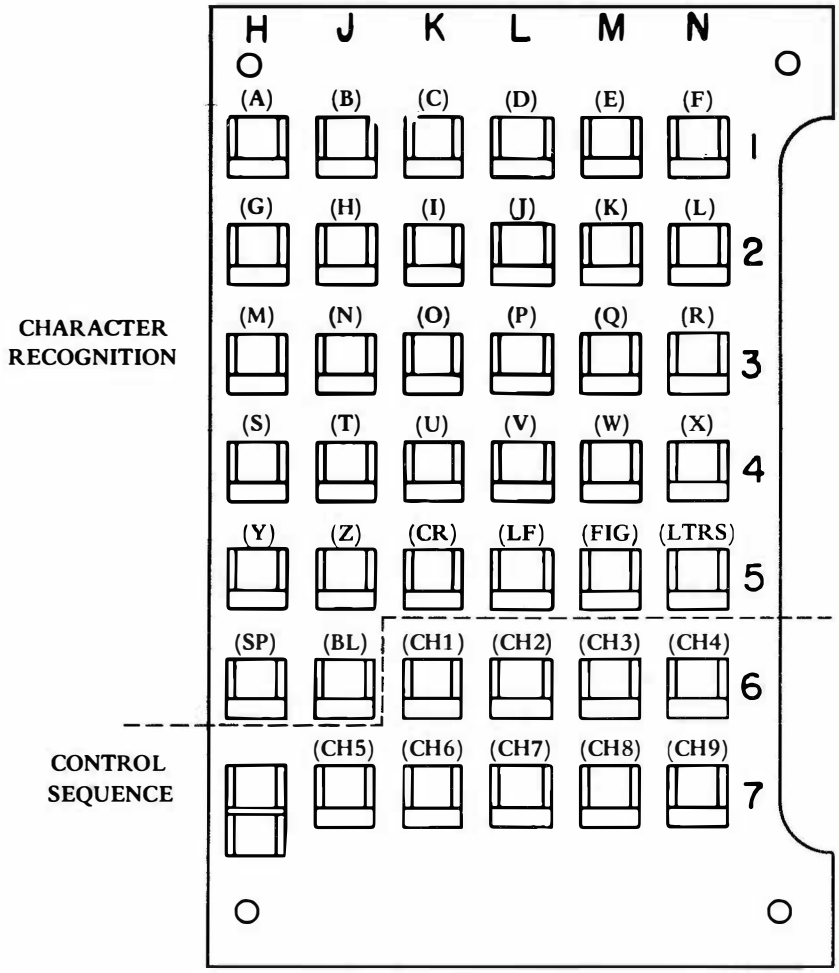


Figure 4 - Terminal Board "A"

TABLE C

PROGRAMMING (STRAPPING) TERMINAL BOARD "A"

CONTROL SEQUENCE FUNCTION	CONTROL SEQUENCE	STRAPPING TERMINALS		CHARACTER STRAPPED
		FROM	TO	
START OF MESSAGE	CH1	A-6K	A-1K	C
	CH2	A-6L	A-5J	Z
	CH3	A-6M	A-1K	C
START OF ADDRESSES	CH4	A-6N	A-1N	F
	CH5	A-7J	A-3H	M
START OF INDIVIDUAL ADDRESSES	CH6	A-7K	A-5K	CR
	CH7	A-7L	A-5K	CR
END OF ADDRESSES	CH8	A-7M	A-1J	B
	CH9	A-7N	A-4J	T

3.08 Operate the transmitter distributor STOP-RUN switch to RUN. The TD should not run. This is because there are no SELECT keys operated and thus no C relays operated. Restore the STOP-RUN switch to STOP.

3.09 Operate all the SELECT keys.

3.10 Operate the TD STOP-RUN switch to RUN.

(a) The TD should run.

(b) The monitor printer should operate.

(c) All reperforators should operate.

3.11 When the Start-of-Message Sequence CZCZ is read the TD should stop (option A).

3.12 Restart the TD by operating the RLS key.

3.13 After the Start-of-Address sequence is read, the logic is prepared for the CR-CR-LF sequence. Upon reading this sequence the TD will stop.

3.14 Set the CONNECT switch to Position 1. Operate the RLS key. The TD should start and Reperforator 1 and the monitor printer should operate. Reperforators 2 thru 8 should remain closed.

3.15 Upon reading CR-CR-LF the transmitter should stop.

3.16 Set the CONNECT switch on Position 2. Operate the RLS key. The TD should start and the monitor printer and Reperforator 2 should operate.

3.17 Repeat for all remaining reperforators.

3.18 Upon reading CR-CR-LF the TD should stop. Restart the TD by operating the RLS key.

3.19 Upon reading the End of Address code BT all reperforators and the monitor printer should operate to copy the message text.

3.20 Either a tape-out condition or the reading of the Start-of-Message code CZCZ will stop the TD.

3.21 Restart the tape from the beginning. While the transmitter is operating, open the tape gate. The transmitter should stop.

3.22 Close the gate and operate both the RLS and CLR keys at the same time. Normal operation should resume.

TROUBLESHOOTING REFERENCES

3.23 Troubleshooting may be accomplished by operation of the segregator in accordance with the checkout procedures of this section to determine the point of operational failure. The probable causes of the failure can then be determined by reference to the circuit description and schematic wiring diagrams of WDP0116 shipped with the equipment. If WDP0116 is not available, the same information (applicable only as of the date of issue) may be obtained from Section 573-114-400TC. This WDP and section also contain actual wiring (cabling) diagrams which may be useful for replacing damaged circuit elements or wiring. Refer to Table A for a list of associated literature. Refer to Section 570-005-800TC for standard maintenance tools.

4. REINSTALLATION ADJUSTMENTS AFTER DISASSEMBLY FOR REPAIRS

4.01 If disassembly is necessary, check the requirements of related Figures 5 through 9 before placing the segregator back in service, then operate the segregator through the checkout procedures of paragraphs 3.01 through 3.22.

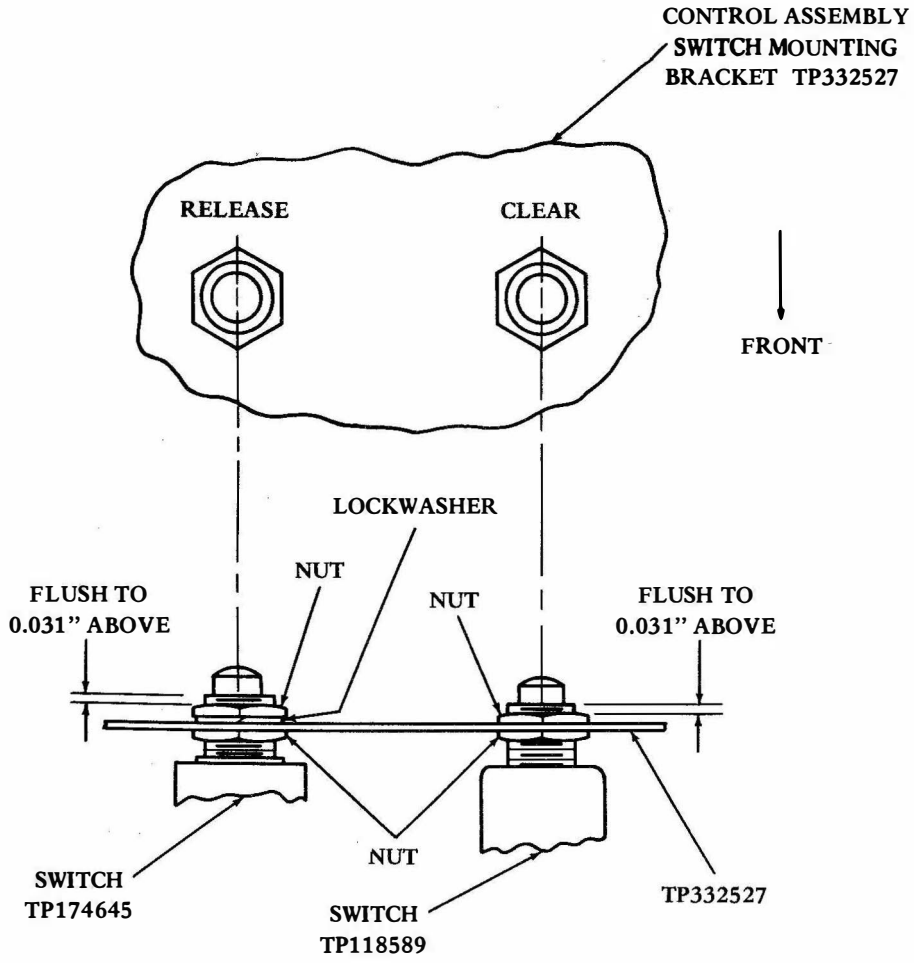


Figure 5 - RELEASE and CLEAR Switch Mounting

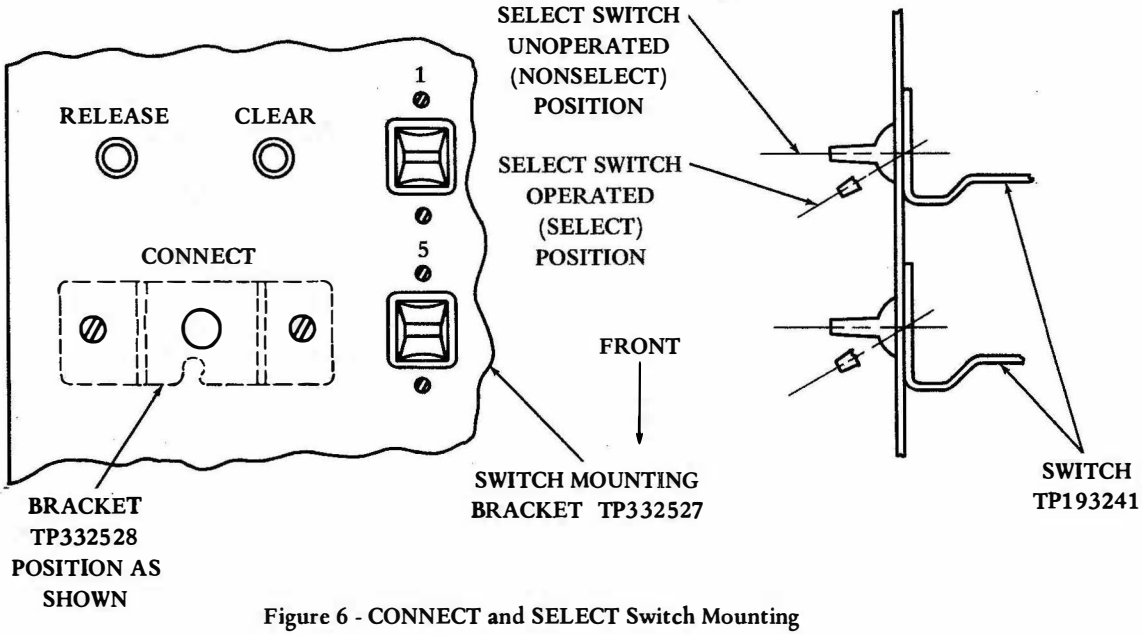
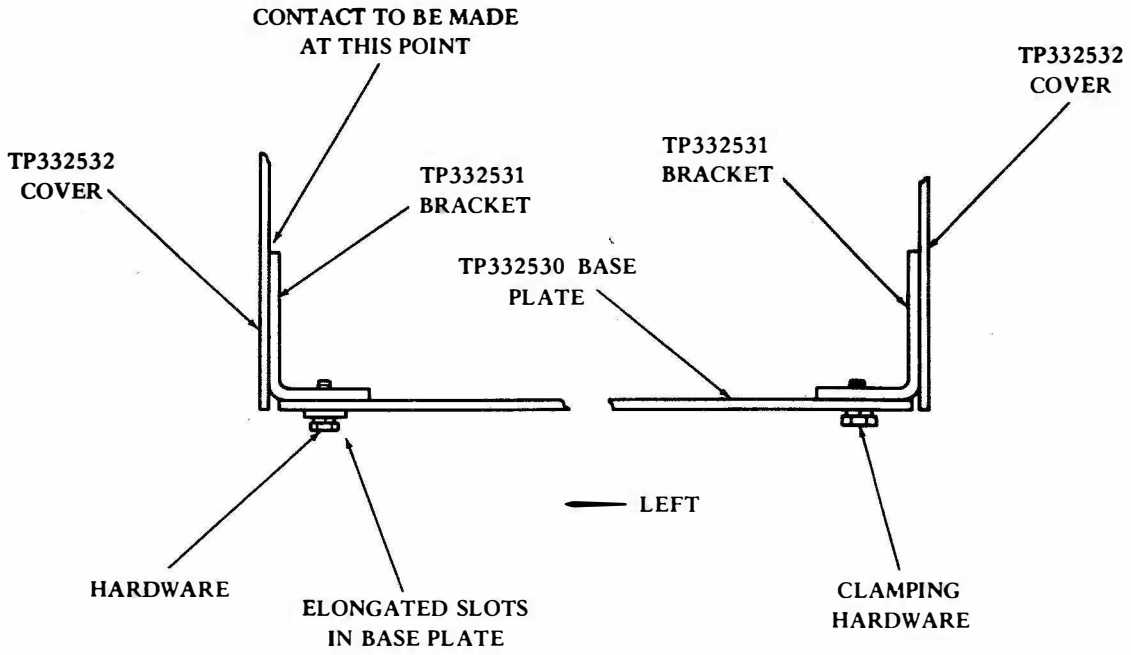
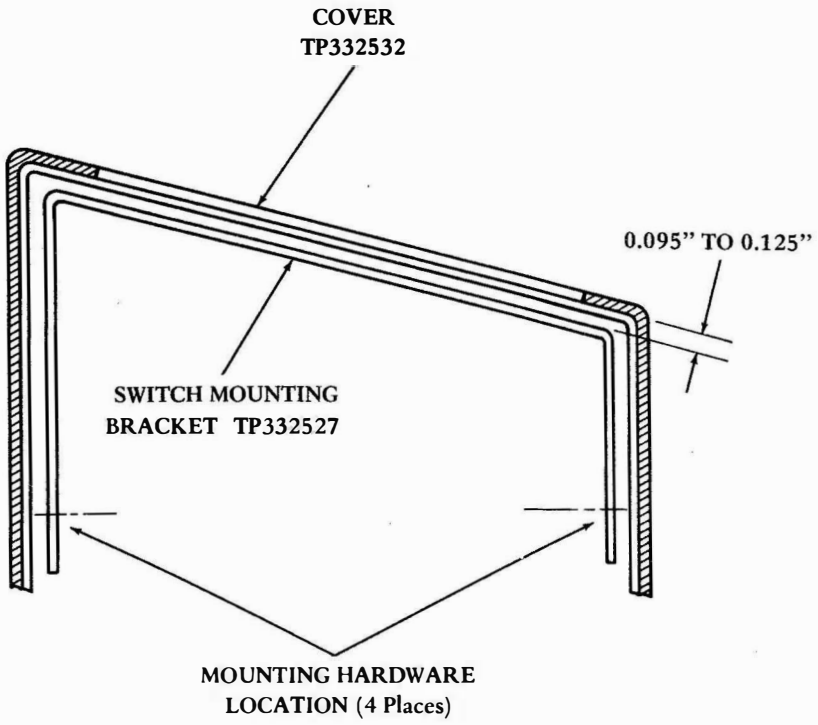


Figure 6 - CONNECT and SELECT Switch Mounting



Note: Clamp bracket (TP332531) on right side to base plate (TP332530) with hardware. Position bracket (TP332531) on left side so that contact is made with cover (TP332532). Clamp bracket (TP332531) to base plate (TP332530) on left side with hardware located in sloted holes.

Figure 7 - Cover Bracket Assembly Positioning



Note: With cover (TP332532) in place and switch mounting bracket (TP332527) hardware friction tight, position switch mounting bracket (TP332527) to desired clearance of 0.095 inch to 0.125 inch. Carefully remove cover, then clamp switch mounting bracket in place.

Figure 8 - Switch Mounting Bracket Position in Cover

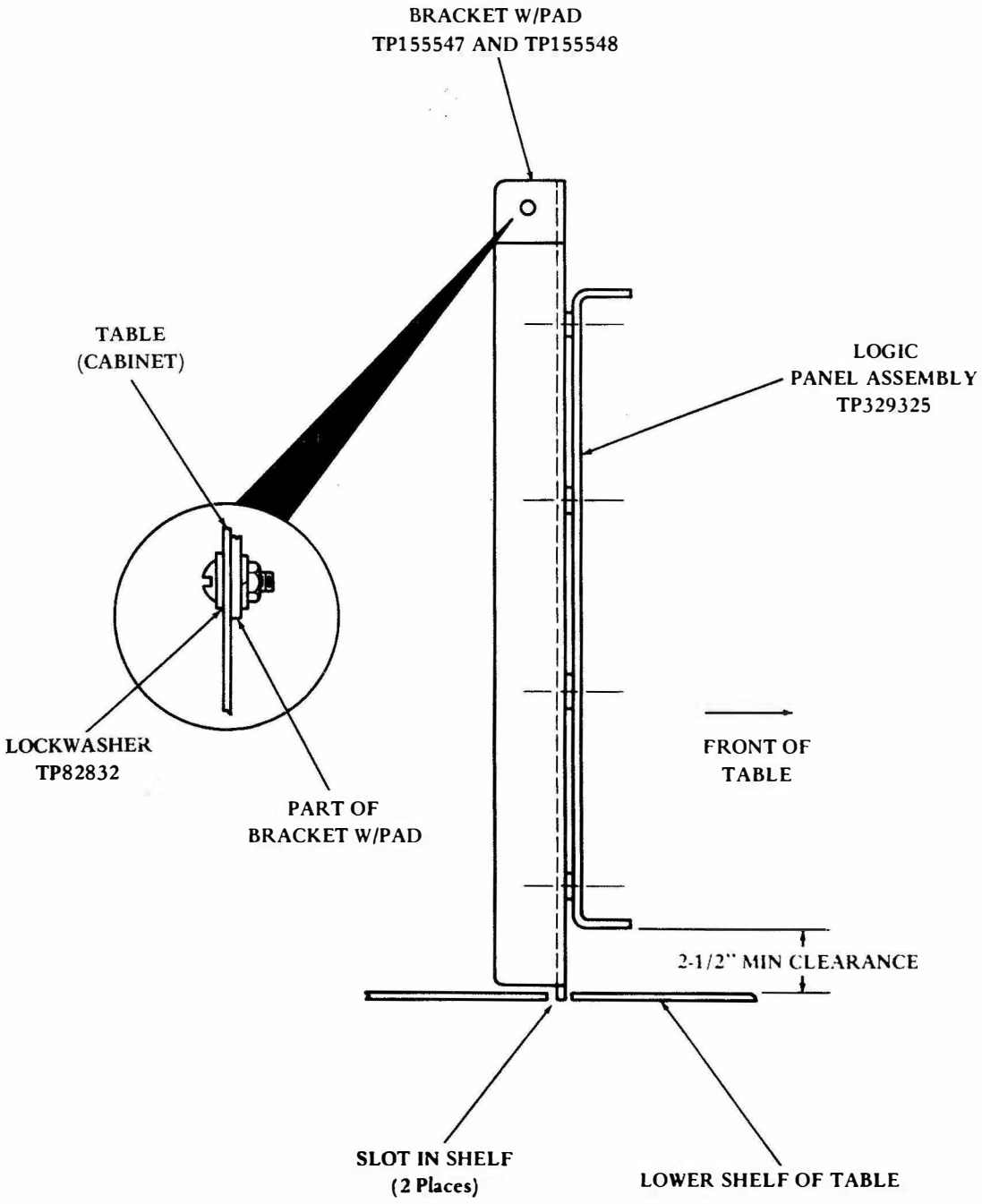


Figure 9 - Logic Panel Position in Table